

REMARKS

This response is intended as a full and complete response to the Office Action dated March 21, 2006. In view of the following amendments and discussion, the Applicants believe that all claims are in allowable form.

DOUBLE PATENTING

35 U.S.C. §101 Claim 18

Claim 18 stand rejected under the statutory-type double patenting as being unpatentable over claim 11 of United States Patent No. 6,776,848, issued August 17, 2004 to *Rosenstein, et. al.*, (hereinafter referred to as "*Rosenstein*"). In response, the Applicants have amended claim 18 to overcome the rejection. Accordingly, the Applicants respectfully request that the statutory-type double patenting rejection be withdrawn.

Obviousness-type double patenting

Claims 4 and 7-10 stand rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 5-7 of *Rosenstein*. In response, the Applicants have filed herewith a Terminal Disclaimer under 37 C.F.R. §1.130(b). Thus, the Applicants respectfully request that the obviousness-type double patenting rejection be withdrawn.

CLAIM REJECTIONS

35 U.S.C. §102

Claims 1 and 16

Claims 1 and 16 stand rejected under 35 U.S.C. § 102(e) as being anticipated by United States Patent No. 6,565,662 issued May 20, 2003, to *Amano, et al.* (hereinafter referred to as *Amano*). In response, the Applicants have amended claim 1 to more clearly recite the aspects of the invention.

Independent claims 1 and 16 recite limitations not taught or suggested by *Amano*. *Amano* teaches using standing frames 64 having a side attached to an upper case 62 and a bottom side positioned in guild rails 67 to facilitate the movement of the

upper casing 62 relative to a main body 61. The upper casing 62 is slid on the guide rails 67 and extended linearly outward to a predetermined position. Thus, as the upper casing moves laterally relative to the main body, the rotational axis of the casing also moves laterally relative to the main body. However, *Amano* does not teach or suggest a hinge coupled to a vacuum chamber body and **having a fixed axis of rotation relative to the chamber body**, and a lid assembly coupled to the chamber body by the hinge, the lid assembly rotatable **about the fixed axis of the hinge** between a first position sealing the open upper end and a second position clear of the upper end, as recited by claims 1; or a hinge coupled to a chamber body and having an **axis of rotation disposed at a fixed location outward of the chamber body**, a lid assembly disposed at a radial distance to the axis of the hinge, the lid assembly rotatable about the axis of the hinge between a first position sealing the open upper end and a second position clear of the upper end, as recited by claim 16.

Thus, the Applicants submit that independent claims 1 and 16 are patentable over *Amano*. Accordingly, the Applicants respectfully request that the rejection be withdrawn and the claims allowed.

35 U.S.C. §102 Claims 1-3 and 5

Claims 1-3 and 5 stand rejected under 35 U.S.C. § 102(b) as being anticipated by United States Patent No. 5,731,678 issued March 24, 1998, to *Zila, et al.* (hereinafter referred to as *Zila*). In response, the Applicants have amended claim 1 to more clearly recite the aspect of the invention.

Independent claim 1 recites limitations not taught or suggested by *Zila*. *Zila* teaches using operator arms 407 to rotate a workpiece W retained in a processing head 406 about a pivot axis 411 from a face-up position to a face-down position. (Col. 6, Lines 10-30). The pivot axis 411 is fixed in the processing head 406 to facilitate the rotation of the workpiece W. Additionally, the operator arms may be pivoted about a second pivot axis 412 to coordinate the workpiece W in a substantially horizontal position. *Zila* does not teach or suggest a hinge coupled to a vacuum chamber body and **having a fixed axis of rotation relative to the chamber body**, and a lid assembly coupled to the chamber body by the hinge, the lid assembly rotatable **about the fixed**

axis of the hinge between a first position sealing the open upper end and a second position clear of the upper end, as recited by claim 1.

"Anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim." *Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 221 USPQ 481, 485 (Fed. Cir. 1984)(citing *Connell v. Sears, Roebuck & Co.*, 722 F.2d 1542, 220 USPQ 193 (Fed. Cir. 1983). Here, *Zila* fails to disclose each and every element of the claimed invention recited by independent claim 1.

Thus, the Applicants submit that independent claim 1, and claims 2-3 and depending therefrom, are patentable over *Zila*. Accordingly, the Applicants respectfully request that the rejection be withdrawn and the claims allowed.

35 U.S.C. §103 Claims 6 and 17

Claims 6 and 17 stand rejected under 35 U.S.C. § 103(a) as being unpatentable by *Amano* in view of United States Patent No. 6,469,448 issued October 22, 2002, to *Taguchi, et al.* (hereinafter referred to as *Taguchi*) in view of United States Patent No. 6,042,707 issued March 28, 2000, to *Moslehi, et al.* (hereinafter referred to as *Moslehi*). In response, the Applicants have amended claim 1 to more clearly recite the aspect of the invention.

Independent claims 1 and 16 recite limitations not taught or suggested by the combination of *Amano*, *Taguchi* and *Moslehi*. The teaching of *Amano* has been discussed above. *Taguchi* teaches a PVD deposition chamber. *Moslehi* teaches using magnetrons in a PVD chamber to facilitate a sputter process. However, modifying the processing chamber taught by *Amano* with to a target as taught by *Taguchi* and/or a magnetrons as taught by *Moslehi* fails to teach or suggest a hinge coupled to a vacuum chamber body and **having a fixed axis of rotation relative to the chamber body**, as recited by claims 1, or a hinge coupled to a chamber body and having an **axis of rotation disposed at a fixed location outward of the chamber body**, and a lid assembly disposed at a radial distance to the axis of the hinge, the lid assembly rotatable about the axis of the hinge between a first position sealing the open upper end and a second position clear of the upper end, as recited by claim 16.

Thus, the Applicants submit that independent claims 1 and 16, and claims 6 and 17 and depending therefrom, are patentable over the combination of *Amano*, *Taguchi* and *Moslehia*. Accordingly, the Applicants respectfully request that the rejection be withdrawn and the claims allowed.

35 U.S.C. §103 Claims 6

Claim 6 stands rejected under 35 U.S.C. § 103(a) as being unpatentable by *Zila* in view *Taguchi* and further in view of *Moslehi*. In response, the Applicants have amended claim 1 to more clearly recite the aspect of the invention.

Independent claim 1 recites limitations not taught or suggested by the combination of *Zila*, *Taguchi* and *Moslehia*. The teachings of *Zila*, *Taguchi* and *Moslehia* have been discussed above. Modifying the processing chamber taught by *Zila* with to a target as taught by *Taguchi* and/or magnetrons as taught by *Moslehia* fails to teach or suggest a hinge coupled to a vacuum chamber body and ***having a fixed axis of rotation relative to the chamber body***, as recited by claims 1. As such, a *prima facie* case of obviousness has not been established as the references fail to teach or suggest all the claim limitation.

Thus, the Applicants submit that independent claim 1, and claim 6 depending therefrom, are patentable over the combination of *Zila*, *Taguchi* and *Moslehia*. Accordingly, the Applicants respectfully request that the rejection be withdrawn and the claims allowed.

35 U.S.C. §103 Claims 11

Claim 11 stands rejected under 35 U.S.C. § 103(a) as being unpatentable by *Zila* in view *Taguchi*. The Applicants respectfully disagree.

Independent claim 11 recites limitations not taught or suggested by the combination of *Zila* and *Taguchi*. The teachings of *Zila* and *Taguchi* have been discussed above. Modifying the processing chamber taught by *Zila* with to a target as taught by *Taguchi* fails to teach or suggest a first mounting bracket coupled to a lid assembly, one or more bearing mounts coupled to a chamber body, a shaft having a fixed position relative to the chamber body and lid assembly, the shaft coupled to the

first mounting bracket and rotatably disposed through the bearing mounts, as recited by claims 11. As such, a *prima facie* case of obviousness has not been established as the references fail to teach or suggest all the claim limitation.

Thus, the Applicants submit that independent claim 11 is patentable over the combination of *Zila* and *Taguchi*. Accordingly, the Applicants respectfully request that the rejection be withdrawn and the claims allowed.

35 U.S.C. §103 Claims 12, 13 and 15

Claims 12, 13 and 15 stand rejected under 35 U.S.C. § 103(a) as being unpatentable by *Zila* in view *Taguchi* as applied to claim 11 and further in view of United States Patent No. 6,198,299 issued March 6, 2001, to *Hollman* (hereinafter referred to as *Hollman*) and United States Patent No. 4,416,102 issued November 22, 1983, to *Peters* (hereinafter referred to as *Peters*). The Applicants respectfully disagree.

Independent claim 11 recites limitations not taught or suggested by the combination of *Zila*, *Taguchi*, *Hollman* and *Peters*. The teachings of *Zila* and *Taguchi* have been discussed above. *Hollman* teaches using pins and bushings to align a chamber lid. *Peters* teaches a C-shape bushing. Modifying the processing chamber taught by *Zila* with to a target as taught by *Taguchi*, pins and bushings as taught by *Hollman* and C-shape bushing as taught by *Peters* fails to teach or suggest a first mounting bracket coupled to a lid assembly, one or more bearing mounts coupled to a chamber body, a shaft having a fixed position relative to the chamber body and lid assembly, the shaft coupled to the first mounting bracket and rotatably disposed through the bearing mounts, as recited by claims 11. As such, a *prima facie* case of obviousness has not been established as the references fail to teach or suggest all the claim limitation.

Thus, the Applicants submit that independent claim 11, and claims 12, 13 and 15 depending therefrom, are patentable over the combination of *Zila*, *Taguchi*, *Hollman* and *Peters*. Accordingly, the Applicants respectfully request that the rejection be withdrawn and the claims allowed.

ALLOWED CLAIMS

The Applicants thank the Examiner for indication of the allowability of claim 14 if rewritten in independent form. However, in view of the discussion and amendments set forth above, the Applicants believe all claims are in allowable form as they now stand.


CONCLUSION

Thus, the Applicants submit that all claims now pending are in condition for allowance. Accordingly, both reconsideration of this application and swift passage to issue are earnestly solicited.

If the Examiner believes that any unresolved issues still exist, it is requested that the Examiner telephone Keith Taboada at (732) 530-9404 so that appropriate arrangements can be made for resolving such issues as expeditiously as possible.

Respectfully submitted,

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Date



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